RTTY

W2JAV and VISITOR (W6NRM)

NEWS OF AMATEUR RTTY

FEBRUARY, 1959
25 Cents
Vol 7, No. 2

HORSE TRADES

This page of the Bulletin is for use of amateurs who have RTTY EQUIPMENT FOR SALE OR TRADE and those looking for equipment to buy or trade. It is a free service and may be the means of getting someone on the air.

For Sale: Model 15 & 26 ..... **RTTY, INC.**
For Sale: Bound Vol. No. 6, 1958 RTTYs $5.00 ..... **RTTY**
For Sale : Model 12 complete with sync motor **W8KVV**
For Sale: AN/FGC Terminal Units **W2KXT**
For Sale: Model 26 complete **W7PVV**
For Sale: Model 26 with table **W7UUB**
For Sale: W6AEE type Terminal Unit, complete... **W7UUB**
For Sale: Tech Manuals for TG-7A & B-(model 15s) **W8CLL**
Wanted: Tech Manuals for 26, and 1-A perf **VE7EP**
Wanted: Model 14 TD **KH6ZD**
For Sale: Communications key tops @ 5.00 set **W6EV**
For Sale: AN/FGC Terminal Unit (uncrated) complete with parts and manual **W6JFZ**
For Sale: Teletype parts and repairs **W9GRW**
For Sale: Model 15 type faces and key top **W9GRW**
For Sale: Model 26 with Communications types, complete **K6CHR**

RTTY, Inc.
372 WEST WARREN WAY
Arcadia, California
Return Postage Guaranteed

SIXTH ANNIVERSARY SS CONTEST

FEBRUARY 13 and 14, 1959

The 1959 Anniversary Contest will be held starting Friday February 13th at Six PM E.S.T. and run for thirty hours, ending at midnight E.S.T. on the 14th.

Messages shall consist of message number, originating station call, check or RST report of two or three numbers, ARRL section of the originator, local time (0000-2400 preferred), date, and band used (Meters or Megacycles.

Scoring will be one point for a msg sent and receipted for entirely by RTTY, and one point for a message received and acknowledged by RTTY. Relaying or repeating by a third station disqualifies the message. The total message points is multiplied by the number of ARRL Sections worked to compute final score. Two stations may exchange messages again on a different band for added message points, but the section multiplier does not increase when the same section is worked on another band. ARRL Sections are as listed in QST (usually page 6) covering Canada, U. S. A. and some possessions. Each foreign country not included as a section but regarded by ARRL for DXCC credit is treated as a new section for RTTY multiplier credit.

Entries to the contest must be mailed within 15 days of its close, and must contain a tabulation of complete message data required by paragraph above both for messages sent and received. It should clearly indicate each new section worked, total section multiplier, total message points, computed score claimed, and a signed statement that all rules have been complied with. At the suggestion of any amateur (or on its own initiative) the judges in the contest may request the original printer copy from any contestant, it being interpreted as record message communication within the meaning of FCC Reg. 12.136 (h) to be retained one year.

Certificates of award will be issued to the highest scoring station in any state in which there are 3 or more contestants. However an exception may be made where home state or country competition is not available provided the applicant specifically requests the award and makes a satisfactory showing of operation at least one quarter of the contest time and his score is above the lowest one-fourth of the contestants. The decisions of the judges are final.

As the contest nears the date Feb. 20th commemorates the anniversary of FSK authorization, only F-1 emission will be used in this contest on bands between 3.5 and 30 Megs.

Sixth Annual New York RTTY Dinner

The Sixth Annual Amateur RTTY Dinner will be held in New York City the evening of March 23, 1959. Technical discussions and demonstrations of teleprinter equipment are planned. Reservations must be made in advance. Details are available from W2EBZ, Clay Cool, 443 West 47th St., New York 36, N. Y.

Attendance last year was almost 50, including amateurs from as far away as Alaska and New Zealand. The same or greater attendance is expected this year. The RTTY dinner is held each year during the I R E National Convention, making it convenient for more amateurs to attend.

REX, WORX.

It is pretty hard for anyone with a two letter call to kid one into thinking he is a young squirt. Rex Howell, Grand Junction, Colorado, is one of hamdom's veterans. Licensed in 1921, radio became both the hobby and profession for Rex. At the tender age of 18, he entered the broadcast business starting his first station KFXJ at Edgewater, Colorado in 1926. Between broadcast schedules Rex used the same gear on 200 meters for his ham contacts!

Today Rex owns two regional radio stations (KREX 5KW Grand Junction and KGLN 1KW at Glenwood Springs, Colorado) and two TV stations KREX-TV channel 5 at Grand Junction and KREY-TV channel 10 at Montrose, Colorado.

In addition to all of his ham activity, Rex also serves as a member of the House of Representatives in the Colorado Legislature, and spends the first quarter of the year in Denver from whence he operates fixed portable.

The gear at WORX consists of Hallicrafters equipment, HT 32, HT 33, HT 20, HT 18 (modified for FSK) with SX 101 and SX 100 receivers. A model 26 with a press association TU rounds out the RTTY gear. A Gates model 1000A 1 KW transmitter is also in the final stages of modification for amateur use.

Rex's hobbies include photography and flying. He is a licensed pilot. He is fifty-one years old and a member of the QCWC as well as ARRL and IRE. He taught communications during World War II for the Navy and at the same time served as group commander for CAP. He holds rank of Lt. Col.

The welcome mat is always out for visiting hams and their families and Rex's stations, studios, home, ham shack, swimming pool and bar, are all on the same ten acre plot at 116 Hillcrest Manor Grand Junction, Colorado.

KL7AUV

Jack, KL7AUV in basement, 14 reperf, SP 600 & 50 mc converter, FGC-1, Six meter converter

KL7BLL

Margie, KL7BLL in kitchen, 5896 keyer in Ranger

Margie, Marijane, Jack and Jack, Portage Glacier

NOVEMBER NCARTS MEETING

On November 21st NCARTS held their 21st meeting. At risk of being considered repetitious it was unanimously agreed that it was one of the best yet. Fifty-three members and guests were present, including THE Bill Gates of "Gates Filters" fame. We also had as guests visitors from the Canal Zone and from Montreal, Canada.

The business of the evening was dispatched in short order. W6NKP, Doc Graham, and W6PHS, Chuck Bey, were elected to the Board of Directors replacing W6EFT, Roger Bunce, and W6FDJ, Roger Wixson. A change in yearly fees was suggested and an amendment passed. It was suggested that a letter be addressed to the FCC in favor of Docket 12648. K6ZBL will make up lists of teletype items for sale or trade, to be included in NCARTS bulletins. "Operator of the week" news should be sent to W6VPC. It was suggested that letters be written to the FCC asking that the CW section of 10 meters be opened to RTTY.

Mention was made that the Model 15's destined for NCARTS are being held up by the telephone company for release by about January 1st.

It was voted that NCARTS contribute $50 to RTTY Magazine as our token of appreciation for this interesting and informative publication that we all so thoroughly enjoy. We know its publisher uses his own funds to make up deficits.

We learned that Frank Ivey, formerly K6-OUR, is now located permanently in the state of Virginia.

A long, long letter from Bruce, ZL1WB, was read aloud, to the delight of the listeners. Bruce related some of his adventures since leaving the U.S. and informed us that he is on his second hundred contacts with his newly-acquired RTTY equipment. He says the CAA of New Zealand is particularly envious of his fine equipment!

W6VVF gave an interesting talk on the subject of communication, with mention of satellites and the part they could play in communication, so vital to the armed forces.

Bill Gates regaled us with his very interesting story of how the "Gates Filters" originated.

W6NRM, Bob Weitbrecht, brought along his miniaturized transistor terminal unit. Its construction is a work of art and we hope Bob will find time to write one of his fine articles for RTTY, giving the details.

Three lovely prizes went to three lucky ladies and then most of the balance of the items went to W6NKP, Doc Graham, including a Model 19 keyboard (donated by W6GGC). Congratulations, Doc, on your good luck! Reported by W6LFF

"AMONG THOSE PRESENT"
NCARTS MEETING 11-21-58

K6ZBL—Russ Stedinger, Oakland; W7GHW/6—Leroy Nelson, Belmont; XYL—Frances Nelson, Belmont; W6CQK—Jack Pitts, Redwood City; W6-NRM—Bob Weitbrecht, San Mateo; K6KVZ—Wayne Taylor, Oakland; XYL—Marion Taylor, Oakland; K6OHF—Eddie Lando, Mill Valley.

K6OFI—Mike Lando, Mill Valley; VE2AGF/6—Tom Lott, San Mateo; XYL—Mary Lott, San Mateo; YL—Helen Maxwell, Montreal; W6ASJ—Chas. Elvin, Piedmont; XYL—Irene Elvin, Piedmont; W6FZC—Nick, El Cerrito; W6YO—David Walker, Oakland; XYL—Ruth Walker, Oakland; K6GZ—Bob Mead, San Mateo; W6GGC—Wally Buckley, S.F.; XYL—Rose Buckley, S.F.; W6PHS—Chuck Bey, S.S.F.; W6QMO—Jeri Bey, S.S.F.; W6MXJ—Art Sloper, S.S.F.; XYL—Eleanore Sloper, S.S.F.; W6LFF—Gin Unsworth, S.F.; W6MTJ—Bob Unsworth, S.F.; Guest—Bill Gates, Sherman Oaks.

K6HYW — Chuck Sabin, S.F.; W6DNX — Jess Fraga, El Cerrito; XYL—Jewell Fraga, El Cerrito; W6WIS—Ken Moore, Millbrae; K6LVM — Geo. Hutchison, Walnut Creek; W6JWF—Frank Johnson, S.F.; K6IZY—Jim Wren, Oakland; XYL—Jo Wren, Oakland; YL—Maryellen Callaway—Pleasant Hill; W6VPC—E. Buchanan, Oakland.

XYL—Maribel Buchanan, Oakland; W6NKP—H. L. Graham, San Jose; W6VVF—W. E. Nichols, S.F.; XYL—Isabel Nichols, S.F.; YL—L. V. Heim, Canal Zone; K6HHD—Jan O'Brien, Sacramento; W6GDO — Jay O'Brien, Sacramento; K6EWE — Jack McCartney, Rio Linda; XYL—Zenda McCartney, Rio Linda; W6ECU—Dorothy Shrader, San Leandro.

W6BNB—Bob Shrader, San Leandro; W6ACN—Archie Waring, Oakland; W6FKQ—Art Sinclair, Oakland; W6ZVV—Hal Jones, San Mateo; W6UQ—Chas. Thompson, Hillsboro; XYL—Kath. Thompson, Hillsboro.

WOYKZ CONTROL UNIT

AND OTHER TRIVIA CONCERNING THE KWS - 1

ROBERT B. SPRINGER — WOYKZ — WICHITA, KANSAS

Most RTTY stations employ a control unit to provide Transmit – Receive and transmitter keying functions. The complexity of the control unit ranges from basic for one machine to gigantic for control of several machines and transmitters.

The larger control systems usually take the form of telephone type patch panels with built in power supplies, automatic send receive control, and transmitter keying circuits. When several machnes are involved, however, the patch panel control system becomes rather involved. The number of patching leads and jacks usually grow in number to some strange, mystic (probably cubic) function of the number of machines and independent lines involved. A detailed mathematical analysis of the subject is rather involved and will not be attempted here. One interesting factor, however, is a constant "K" which keeps popping up in equations involving patch panels. A careful study reveals that "K" is the "nowhere termination" factor which accounts for all those leads that leave the panel and don't really go anywhere.

This ingenious little control system replaces all those complicated patch cords with more complicated switches. The saving in wire cost will more than pay for the control unit. To belabor the obvious we shall explain just what this gem is supposed to do if wired according to directions.

The four rather ugly switches in Fig. 1 (SW-1, 2, 3, and 4) each control the signal lines to four different machines. Each switch transfers a machine between two independent lines, while closing the unused line. The line jacks are all shorting type, and will close the used line when the machine is disconnected. The two loops used are the operate loop and the local loop. The local loop is merely a 20 ma closed loop used for cutting tape, sending letters to one's self, etc. The operate loop is the loop containing the terminal unit, FSK keying relay, and standby–operate circuit. For purposes of confusion, the operate loop is cleverly referred to as Loop - 1 in the diagram.

RY-1 is an impulse relay which is operated by the Xmit-Receive button and/or the bell break contacts. This is the Transmit-Receive relay which, when activated, does just lots of things. On receive it opens the transmitter key line. This is necessary for us poor folk with KWS-1s. The oscillator in the KWS-1 will run in receive if the key is left down. On transmit, the Xmit-Receive line is closed to activate the station Transmit-Receive system. The KWS-1 must be modified to permit remote Transmit-Receive function on CW. We shall cross this bridge later.

RY-2 provides the "Transmit-Receive-Operate-Standby" function for this whole mess. This relay controls the signal in the operate loop. During receive, the relay coil is not energized. Thus the relay connects the output of the terminal unit to the operate loop, and removes the signal winding of the polar relay from the operate loop. During transmit the coil is energized, and current from the internal power supply flows through the operate loop and polar relay. The terminal unit is disconnected during transmit. This switching is done automatically by contacts on RY-1. During receive, however, the remote Standby-Operate switch allows this relay to be energized independently of RY-1 so that the operate loop is used as a local loop.

The remaining contacts on RY-1 control a neon Transmit Light. This light helps immeasureably in keeping things straight!

The remote switches are located on the keyboard of the Model 28 Teletype. Circuit of the remote unit is shown in Fig. 2.

The fixed ½ watt resistors in the power supply are meter shunts for a built in millameter. The four pots are set as follows: Loop-1, 20 ma., Loop-2, 20 ma., Polar Bias, 10 ma., and Reperf Bias, 60 ma.

In actual operation, the Model 28 is connected to Line-1, the Model 14 TD to Line-2, the Model 14 Reperf to Line-3, and the Model 26 to Line-4. The usual operation uses the Model 28 and the TD on the operate loop, with the Reperf. and the Model 26 on the local loop for cutting tape. Any or all of the machines may be put on either loop by simple switching, which eliminates the possibility of hangng one's self on dangling patch cords or tripping over sundry leads around the shack.

Clever inspection of the switches will reveal that as the switch is moved from one position to another both loops will be left open for a small time. This time being the time necessary to break one side and make the other side of the switch. By giving the switches a smart snap in the prescribed military manner, this time is so short that a start pulse is not generated in any of the machines.

Fig. 3 shows the necessary wiring changes for adding remote Transmit-Receive control to the KWS-1. S101A (front) normally grounds the cathode of V103B (relay amplifier) in the CW position. Remove the lead from pin 12 of S101A (front) and connect this lead to a wire run to an empty pin of J102. Run a second wire from another empty pin of J102 to pin 12 of S101A. These two leads now connect through J102 to the remote Transmit-Receive relay. Other emmission circuits are not affected by this modification.

The normal key lines are removed from PL102 and longer lines are run with the new Transmit-Receive lines to the control unit. These are attached to the leads marked "To Xmtr Key Jack" in fig. 1. Additional blank J102 pins are available for the FSK keying leads if desired.

Merrill, over my loud protests, printed my vigorous condemnation of the excellent circuit by W3PYW for shifting the KWS-1. I did not realize at first that Frank had used a shielded lead from his keyer to the PTO oscillator grid. Without shielding, as I pointed out from experience, this little wire gives the PTO the now famous Yo-Yo effect, a strange phenomenon which allows one to QSY a minimum of 100 kc when changing sidebands! To atone for our sins we went Frank one better by building the FSK unit directly on the PTO chassis. The 6AL5 was mounted on the right side of the oscillator chassis, and the added 0A2 was mounted underneath the chassis. The shift control pot was mounted through a ventilation slot on the left side of the cabinet, and the two FSK keying leads attached to blank pins of J102. This circuit is also shown in Fig. 3 for the benefit of others who have their KWS-1s paid for.

LIST OF PARTS

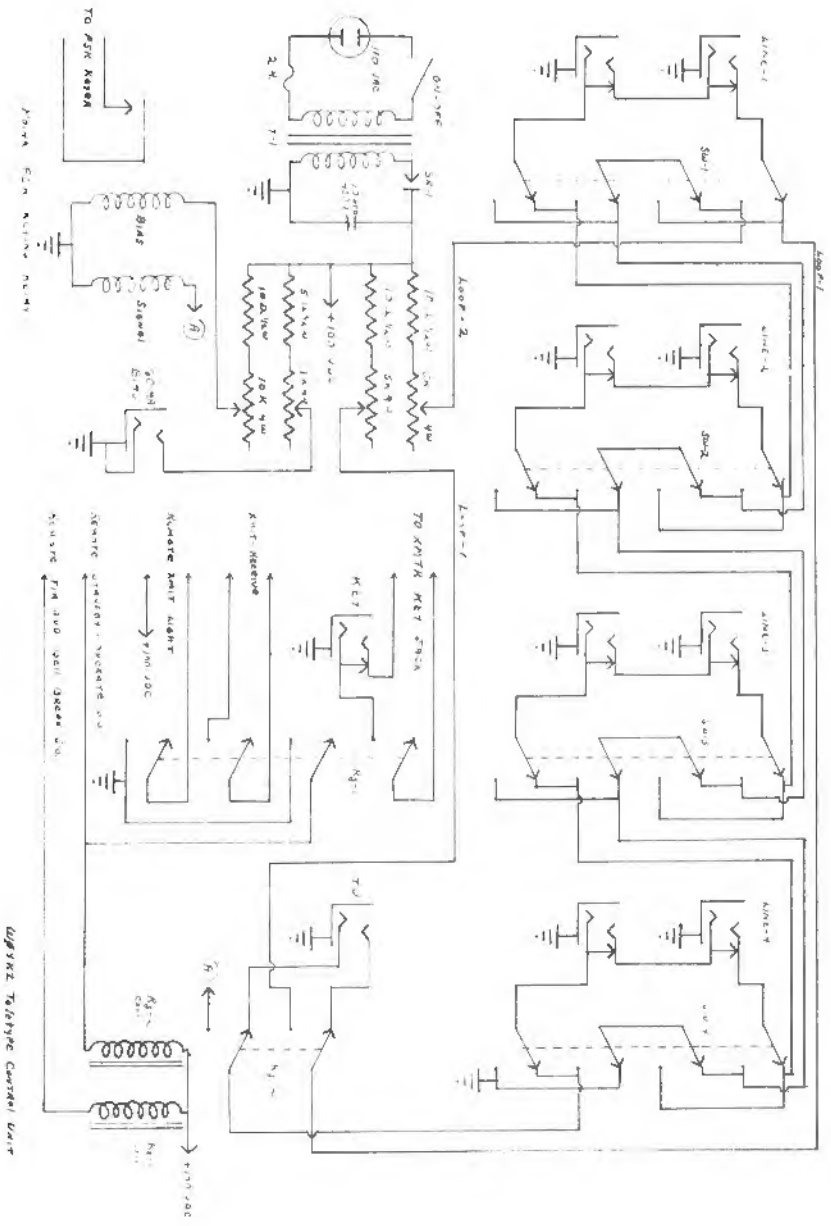
SW-1 through 4 – 4 pole double throw, Centralab PA-1011

T-1 – 1:1 isolation transformer, 120 ma or better

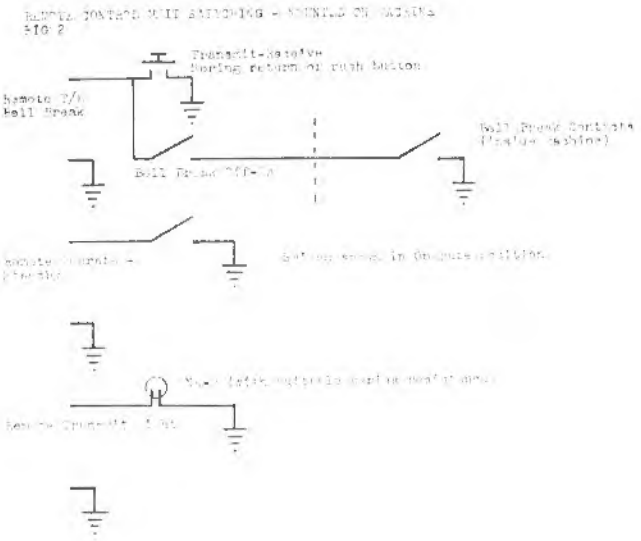
RY-1 – 4 pole single throw impulse relay, 110 vdc coil.

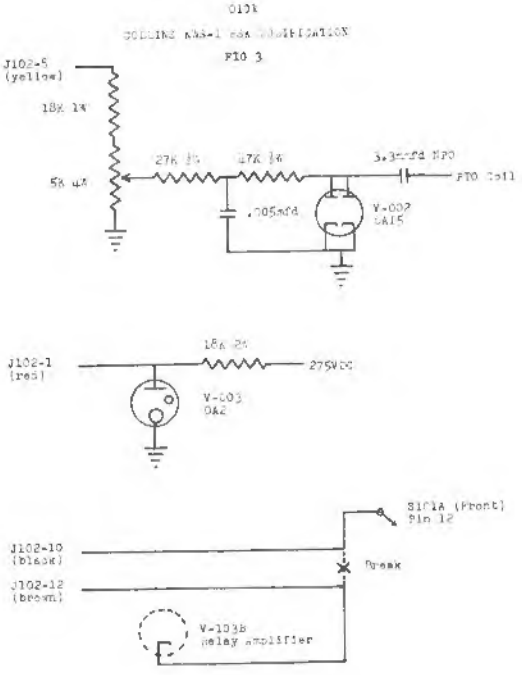
RY-2 – Double pole double throw relay, 110 vdc coil.

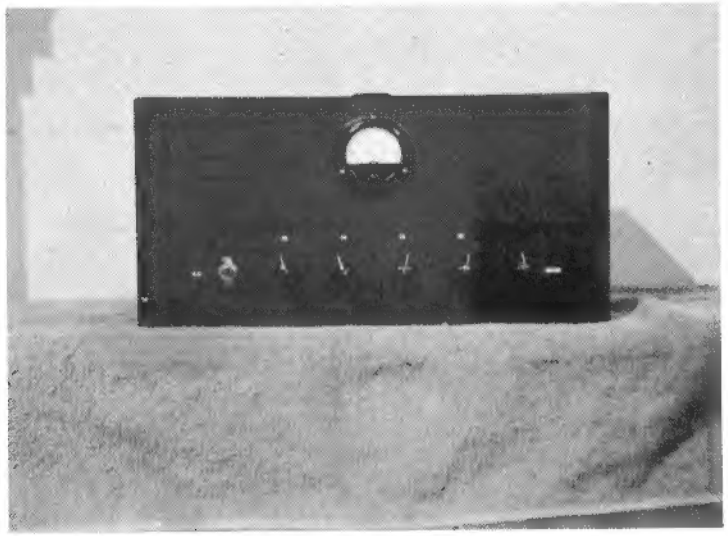
SR-1 – Sarkes Tarzian M-500 silicon rectifier, 130 v, 500 ma.



WØYKZ Teletype Control Unit
Fig 1







Left to right: AC Power, Line 1 (Model 28), Line 2 (Model 14 TD), Line 3 (Model 14 Reperf), Line 4 (Model 26), and Meter Switch.

Left to right: Model 28, Model 14 TD, Model 14 Reperf, Model 26.
Center: Control Unit. Note added switches on keyboard of Model 28.
Left: Operate—Standby, Transmit Light
Right: Bell Break—OFF/ON, Transmit (SPST Push Button)

QST QST QST DE WOBP WOBP WOBP FLASH! PHLASCH! Model 15 printers officially released!!!

Merrill W6AEE tonight Oct. 23rd broke in on a WOPB contact to make the long awaited announcement that he had just gotten the release of a large number of Model 15 printers from the Pacific Telephone Co. . . They will be distributed similar to the successful plan followed for many years out there on the Model 26. . . Eastern warnings can be discarded as Merrill assures there is no hocus-pocus as these printers are all complete with base, typing unit, keyboard, cover, synch motor, and table! They are all believed in good operating condition as taken out of the subscriber loop. (Mebbee due for a 5,000 mile oil change.) The price has been set at ninety dollars ($90.00). However it would require Merrill Merrill to dig into his wallet to the tune of thousands of dollars and after the end of this month when he takes delivery it will require trucking and warehousing expenses. Out of town amateurs can order the machines and tables crated at a charge undetermined at the moment, possibly in the vicinity of ten dollars (no doubt Merrill will refund any overage), and the machines will be shipped with transportation charges c.o.d. Checks should be made payable to RTTY, Inc., care Merrill Swan, W6AEE, 372 West Warren Way, Arcadia, Calif. (No commission to WOPB, dammit!) A large quantity of repair and other replacement parts are being turned over to W6AEE, and we think somebody else might take this headache . . It is expected Merrill will share some machines with NCARTS thru Buck W6VPC, or else other machines will be similarly available in the Bay area now that the Pacific policy has been settled . . . The West Coast is again to be congratulated on this forward step in printer distribution, so necessary to make our facet of amateur radio expand . . .

Harold Wade W7HRC advises there are about a dozen more Model 26 machines available in the Seattle area and the price is still fifty dollars ($50.00) plus eight fifty ($8.50) crating charge. Upon receipt of certified check for $58.50 W7 Hot Rod Charlie will ship c.o.d. If you also enclose his waiver form sworn to that you won't use commercially. WOBP has these waiver forms and a tape rerun that answers all questions except on the perfect terminal unit. The 26 is lighter than the 15, makes less noise for home or apartment use, but often has troubles in paper tearing in the intake chute if not watched and promptly corrected. Harold does not expect fifteens released in the Puget Sound area right away. He states the high level Pacific Telephone policy is fourfold on printers taken back from subscribers: (1) Reassign to other subscribers, (2) Reuse in the region or area, (3) Make available to the local Ham societies under contract assuring the machines will never be used in commercial competition, (4) Smash up and scrap for metals. That's the priority on each machine. We note with regret that part three of the "Pacific program has been skipped over in other parts of the country and thousands of usable machines have come under the hammer or are compressed amid flying sparks and tons of pressure into a fist sized block of steel. Our plea for all sections of the country is: (1) Such destruction is a loss of considerable salvage value, (2) Amateur and experimental use of teleprinters can never grow like single-sideband until we have an even flow of machines reasonably priced from several sources, (3) The day is coming when huge volume of emergency traffic can be handled by amateur radio printers, and (4) One of the best excuses for amateur radio is its self training of thousands of people for possible future war service in knowing what's behind the buttons. We are sure A T & T Co. and its subsidiaries want us to win the next war, but a little more cooperation in making available the cast off machines would be a great help in the amateur radio self-training field.

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Sure is a great thing—panoramic adapter —makes me wonder why I didn't have it years ago. Is a fine visual tuning aid and also monitors for other signals—in a sense it is easier and smoother to anticipate a signal as you bring it in to the center of the screen than to "listen" as you scan the receiver dial. At least you don't get your ear drums blasted open.

15 meters is open in evenings . . . last nite had a wonderful hour and half QSO with Bruce—perfect and solid like a local! Bruce copied my experimental retransmit of W6VPC last Wednesday so well that I have decided to extend the NCARTS coverage to the Pacific area every Wednesday on 21080 kc. Incidentally I am using two meter pickup for this job—have gotten an International Crystal FCV-2 converter going, feeding into a BC348P receiver (broad i-f) tuned to 10.29 mc. Use a ground plane vertical for two meter pickup—and I retransmit on 21080 mc through another nearby ground plane vertical. Also use two meter pickup on the W6ASJ sigs — Saturdays and Sundays. Seems to work for smoother operation as two meter sigs sure are good in the Bay area.

K6GZ is now the third RTTY station to have Conference Circuit installation, and Bob and I had a wonderful two hour "full duplex local copy by signal return" QSO on 3760 and 3620 kc the other nite. He has a very neat keyboard injector system, and I am planning to make some fotographs for the forthcoming article. (Other stations having system: (besides myself) W9SPT and W8SDZ). Altogether four stations thus equipped. And I have been told that W6VPC and K6??? in Oakland have taken interest and want more info on the system.

Also visited Bart last nite . . he has some idea about "instantaneous Switching system for RTTY using knee operated switch to operate xmtr". Receivers will need mark-hold circuits to keep printers quiet during no-signal . . . but interesting thought. —W6NRM

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DX

Activity. Tuesday hooked Don W4EHU with Eric VK3KF near Melbourne and Eric. Now only needs the first district. Friday printing was fine from VK3KF and he said he has his final done, but when he complained about lack of RTTY stations Jack KL7AUV broke in and we chatted till after midnight. The Saturday morning schedule was fine except we worked Cas KR6AK instead of Eric from 6.50 till nine a.m. Cas was gripping about not enuf RTTY activity. Immediately Jack W1BGW of Boston broke in and we had a fine three way RTTY roundtable, ending with a schedule for this morning and he would try and get Joe and Mike of VS1HU on near Singapore. Saturday night we had about the best printing possible from Eric VK3KF. About midnight we worked Bruce ZL1WB with about 80 per cent printing each way. Bruce does not have all his new gear hooked up yet but is working hard at it and will also have more power soon. Bruce broke the news that he had gotten Ron ZL1AHO and Hilton ZL1AKQ both of Pavakura going on RTTY but on eighty meters at present. It so happened we had worked ZL1RD at Owhango on CW who had told about hearing those three testing RTTY, so we told Bruce we know about it! He said they were very unstable on eighty and have some problems before getting on fifteen. We looked for Cas this morning but instead worked Eric at seven a.m. Cas had lowered his aerials until about Thursday due to another typhoon, then we recalled something a day or so ago about predicted winds of 240 miles per hour which seemed unbelievable. Just as Eric was starting to fade, Jack W1BGW showed up and came close to getting back the world RTTY DX record again, this time to VK-3KF. Eric printed Jack fine for a short time when his sigs went up to S8 and WOBP down to S3, then the band folded before Jack printed Eric but they will look for each other on 21083 next weekend if not before. Visitors always welcome.

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This is the Sunday meeting of the "Forty RTTY Net Plus Fifteen." Control station is WOBP operating on 7140 and 21-090 KCS every Sunday afternoon. Alternate net controls are "Lyle" WOFOW Des Moines and "Ken" WOKXB Topeka.

Roll call starts at one p.m. Central Standard Time, 1900 GMT, and we should progress from the ones and twos thru the eights and nines with their comments in about an hour. Then follows a general RTTY broadcast at about 2 p.m. CST, 2000 GMT, and the net concludes with the roll call of the zero district. Altho individual calls are made for stations that frequently check in, new members and visitors are welcome by answering the CQ calls to their districts. WOBP will indicate which frequency he is listening on for replies. A slight revision of the ritual is being tried wherein the CW call will be made first, which allows a few seconds to touch up the tuning by scope, then the taped RTTY call ending with double blank which switches off transmitters and turns on receiver instantly. "Advanced RTTY-ers" are simplifying their controls to one switch, sometimes with a printer muting position, and fast "break" operation is becoming common by adding a few cheap relays.

Roll call now follows. Please zero beat within a hundred cycles of the NCS station and reply smartly! The net is informal in that you are encouraged to comment on local weather, signals from others in the net, and inject items of possible general interest, but please keep it short if many are waiting. Here is steady "mark" to zero on.

W9DPY W9DPY DE W8CRY in Lake Orion Michigan

Well at last I have been trying to get ahold of you for a contact since I got on RTTY about a year ago and I guess that this is it. The name here is Ken.

When I first tried to set up this rig I keep hearing you on but never could get you solid. I could get the W9 and nothing else for several different nights and finally I did get the whole call but I haven't been able to contact you.

Guess you are printing.

W9DPY DE W8CRY in Lake Orion Michigan K

W8CRY DE W9DPY Lombard Illinois

Roger and am printing you fine 599 599 here and very fine. Well this machine runs high on the range for some reason and that is part of the trouble. Then you are too close to me for a good signal.

Name Dave here and have low power on about 300 watts to a ground plane vertical about 200 feet from the house. Can up the power if you have trouble.

Am away a lot and that's the reason for not hearing me lately. Heard you about three hours ago but had to go to dinner then and watched the color TV awhile. Hi Hi. W8CRY DE W9DPY

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TO OUR READERS . . .

Please take a look at your name and address on this issue, you will note a date below the town and state. If it shows a date before current date, this will be last issue mailed you. Costs of printing the bulletin are too high to continue carrying subscription beyond expiration date.

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RTTY Society of Southern California

and is published for the benefit of all RTTY Amateurs and Experimenters

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For Information Regarding the Society Contact the Following:

W6AEE — Merrill Swan
W6SCQ — Lewis Rogerson

For Traffic Net Information:
W6FLW W6IZJ

For "RTTY" Information:
W6DEO W6AEE

W2PAU, BROWNIE

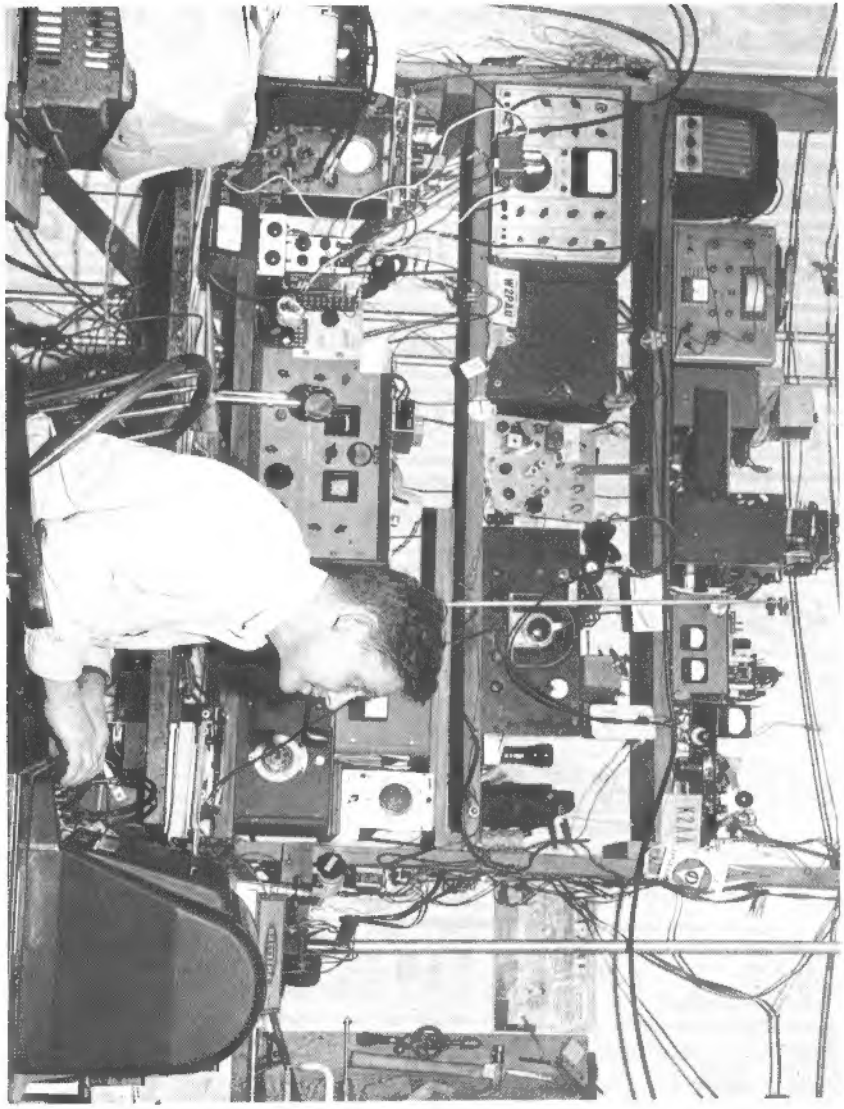

Photo by W2OGZ

FASTEST TELETYPEWRITER FORMS 3000 WORDS PER MINUTE

NEW YORK, N. Y.—A new 3000 word a minute teletypewriter, reportedly the fastest general-purpose message printer ever developed, has been announced by Burroughs Corp. Displayed in conjunction with the Army Signal Research and Development Laboratory, the device prints four full lines of text each second. In place of keys or other imprinting devices, the unit uses a series of electrode "guns."

The process utilizes a controlled source of electricity to form small charged areas on high-resisitivity surfaces such as coated paper. The electrostatic latent image is made visible by application of powdered ink and permanently fixed by application of heat. Each recording head, of which 72 form a printing line, consists of 35 wires which form a rectangle 7 wires high and 5 wires wide. Electric pulses charge all 35 wires or any combination in each head. A normal line of type is produced by setting up the first character in the line across all 72 heads. The only head that prints is the one selected by a coincident pulse to the back plate, located behind the sensitive paper. The second character in the word is set up across the line and printed serially in the same manner.

The latent image on the paper's surface is passed through an inker containing a dry powder. The image is made permanently visible by then passing the inked paper over a temperature-controlled hot plate. According to the company, the theoretical top speed of the all-electronic page printing system could reach 500,000 words a minute.

NEW ARMY TELETYPEWRITER can type 3000 words a minute. This is equivalent to 6 ft of paper.